

MULTIMEDIA



UNIVERSITY

STUDENT IDENTIFICATION NO

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MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 1, 2019/2020

TFF2231 – FUNDAMENTALS OF FINANCE

(All sections / Groups)

19 OCTOBER 2019

2.30 p.m – 4.30 p.m

(2 Hours)

INSTRUCTIONS TO STUDENT

1. This Question paper consists of 6 pages with 4 Questions only.
2. Attempt **ALL** questions. All questions carry equal marks and the distribution of the marks for each question is given.
3. Please write all your answers in the Answer Booklet provided.

Answer ALL FOUR (4) questions. All questions carry equal marks and the distribution of the marks for each question is given.

QUESTION 1

A. Define finance and briefly describe **THREE (3)** roles of finance in business.
(9 marks)

B. The Malaysian bond market is one of the most developed and dynamic bond markets in the region. It is the largest local currency bond market in the Association of Southeast Asian Nations (ASEAN). As of 31 December 2011, the market reached the size of MYR848 billion (equivalent to RM 282.3 billion). This phenomenal development of the Malaysian bond market has largely been achieved through the exceptional growth of the corporate bonds and Sukuk markets.

i. What are **FOUR (4)** key features of a bond?
(4 marks)

ii. What is the value of a 10-year, RM 1,000 par value bond with a 10 percent annual coupon if its required rate of return (YTM) is 10 percent?
(6 marks)

iii. What would be the value of the bond if the expected inflation rate rose by 3 percentage points, causing investors to require a 13 percent return (YTM)? Would we now have a discount or a premium bond?
(6 marks)

[TOTAL 25 MARKS]

Continued...

QUESTION 2

A. You would like to have RM 50,000 in 15 years. To accumulate this amount, you plan to invest in Asia Pacific Trust Fund which will earn 7 % interest compounded annually. Show your timeline and calculate these independent scenarios of cash payment.

- i. If you plan to deposit each year an equal sum in the bank, how much must you deposit annually to accumulate this amount? Your first payment will be made at the end of the year.

(4 marks)

- ii. If you decide to make a large lump-sum deposit today instead of the annual deposits how much should this lump-sum deposit be?

(2 marks)

- iii. If you invested RM 5,000 today, RM 10,000 in year 5 and RM 25,000 in year 10 will you have enough RM 50,000 in 15 years?

(4 marks)

B. IQI Property Bhd. has to decide on the following mutually exclusive construction projects. The company's standard operating procedure in project selection strictly calls for a four-year cutoff. Additionally, the required return of both projects is expected to be 10%.

Year	Project Melaka Ceria	Project Melaka Bahagia
0	- RM 150,000	- RM 150,000
1	RM 30,000	-
2	RM 40,000	-
3	RM 50,000	-
4	RM 60,000	RM 50,000
5	RM 70,000	RM 200,000

Continued...

- i. Calculate the payback period (PP) for both projects.
(4 marks)
- ii. Calculate the net present value (NPV) for both projects.
(6 marks)
- iii. Calculate the profitability index (PI) for both projects.
(4 marks)
- iv. Based on your answers in (a) to (c), which project should IQI Property Bhd choose? Why?
(1 mark)

[TOTAL 25 MARKS]

QUESTION 3

A. Aiken Bhd. is evaluating two different capital structures. Plan A will result in 8,500 units of ordinary shares and RM361,000 in debt. Plan B will result in 12,000 units of ordinary shares and RM228,000 in debt. The interest rate on the debt is 10%. Ignoring tax, compare both of these plans to Aiken Bhd.'s existing, all-equity plan assuming that EBIT will be RM 61,000. The all-equity plan has 18,000 units of shares outstanding.

- i. Determine which of the three plans has the highest as well as the lowest EPS.
(6 marks)
- ii. Find out the break-even EBIT between
 - a. All-equity plan and Plan A
 - b. All equity plan and Plan B
(6 marks)

B. Official Music Bhd has 23,000 shares of ordinary shares outstanding at a price per share of RM 57 and a rate of return of 14.2 percent. The firm has 6,000 shares of 7 percent preferred share outstanding at a price of RM 48 a share. The preferred share has a par value of RM 100. The outstanding bond has a total face value of RM 350,000 and currently sells for 102 percent of face. The yield to maturity on the bond is 8.49 percent.

- i. What is the weight of each cost of capital?

(6 marks)

- ii. What is the firm's weighted average cost of capital (WACC) if the tax rate is 34 percent?

(7 marks)

[TOTAL 25 MARKS]

QUESTION 4

A. Cash is also known as money, in physical form. Cash, in a corporate setting, usually includes bank accounts and marketable securities, such as government bonds and banker's acceptances. Although cash typically refers to money in hand, the term can also be used to indicate money in banking accounts, checks, or any other form of currency that is easily accessible and can be quickly turned into physical cash.

- i. List **TWO (2)** sources and **TWO (2)** uses of cash.

(4 marks)

- ii. Briefly explain **FOUR (4)** reasons for holding cash.

(4 marks)

- iii. Suppose your average inventory is RM 10,000, your average receivables balance is RM 9,000, and your average payables balance is RM 4,000. Net sales are RM 100,000 and cost of goods sold is RM 50,000. What are the operating cycle and cash cycle?

(6 marks)

Continued...

B. Lavender Fragrances store begins each week with 180 units of perfumes in inventory. This inventory depletes each week and are reordered. The carrying cost per perfumes is RM 51 per year and the fixed order cost is RM 120.

- i. What is the total carrying cost?
(2 marks)
- ii. What is the total re-stocking cost?
(2 marks)
- iii. What is the total cost?
(2 marks)
- iv. What is the Economic Order Quantity (EOQ)?
(3 marks)
- v. Analyze the optimal order policy for Lavender Fragrances store in terms of order size and order frequency.
(2 marks)

[TOTAL 25 MARKS]

APPENDIX

Future Value:

$$FV = PV(1 + r)^t$$

Annuities

$$PV = PMT \left[\frac{1 - \frac{1}{(1+r)^t}}{r} \right]$$

$$FV = PMT \left[\frac{(1+r)^t - 1}{r} \right]$$

$$\text{Perpetuity: } PV = PMT / r$$

EAR & APR

$$EAR = \left[1 + \frac{APR}{m} \right]^m - 1$$

$$APR = m \left[(1 + EAR)^{1/m} - 1 \right]$$

Bond Pricing

$$\text{Bond Value} = C \left[\frac{1 - \frac{1}{(1+YTM)^t}}{YTM} \right] + \frac{F}{(1+YTM)^t}$$

Stock Value

$$\hat{P}_0 = \sum_{t=1}^{\infty} \frac{D_t}{(1+R)^t}$$

Estimating Dividends

$$\text{Zero growth: } P_0 = D / R$$

$$\text{Constant Growth Stock: } D_t = D_0(1+g)^t$$

Dividend Growth Model:

$$\hat{P}_0 = \frac{D_0(1+g)}{R-g} = \frac{D_1}{R-g}$$

Nonconstant + Constant growth

$$\hat{P}_0 = \frac{D_1}{(1+R)^1} + \frac{D_2}{(1+R)^2} + \frac{D_3}{(1+R)^3} + \dots + \frac{D_{\infty}}{(1+R)^{\infty}}$$

Net Present Value

$$NPV = \sum_{t=0}^n \frac{CF_t}{(1+R)^t} - CF_0$$

Cost of equity

$$R_E = R_f + \beta_E (E(R_M) - R_f)$$

WACC

$$= E/V \times R_E + P/V \times R_P + D/V \times R_D (1 - T_C)$$

Operating cycle

$$= \text{inventory period} + \text{accounts receivable period}$$

Cash Cycle

$$= \text{Operating Cycle} - \text{Accounts payable period}$$

EOQ Model

$$Q^* = \sqrt{\frac{2TF}{CC}}$$

End of Paper